

IN THE CLAIMS

1. (Currently Amended) A process for producing polyurethane foams comprising reacting isocyanates with compounds which are reactive toward isocyanates in the presence of blowing agents and in the presence or absence of catalysts, additives and/or auxiliaries, wherein the reaction forms urethane and/or urea bonds and is carried out in the presence of at least one compound (i) which has unsaturated functionality and is selected from the group consisting of crotonic acid, hydroxyethyl acrylate, 3-(acryloyl-oxy)-2-hydroxypropyl methacrylate, benzyl cinnamate, trans-3-nonen-2-one, and combinations thereof, wherein the at least one compound (i) is used in an amount of from 0.1 to 20% by weight based on the weight of the polyurethane foam, and wherein the unsaturated functionality of at least 0.1% by weight of compound (i) based on the weight of the polyurethane foam is either:

1) reacted with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in the polyurethane foam, or

2) unreacted and available for reaction with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in the polyurethane foam.

Claims 2-3 (Cancelled).

4. (Currently Amended) A process as claimed in claim 1, wherein compound (i) is used in an amount of from 0.5 to 10% by weight, based on the weight of the polyurethane foam, and wherein the unsaturated functionality of at least 0.5% by weight of compound (i) based on the weight of the polyurethane foam is either:

1) reacted with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in the polyurethane foam, or

2) unreacted and available for reaction with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in the polyurethane foam.

5. (Cancelled).

6. (Currently Amended) A polyurethane foam comprising:
urethane and/or urea bonds, and
 _____ products of the reaction of primary and/or secondary amines formed from cleavage of a urethane and/or urea bond in the polyurethane foam with at least one compound (i) which has unsaturated functionality and is selected from the group consisting of: crotonic acid, hydroxyethyl acrylate, 3-(acryloyl-oxy)-2-hydroxypropyl methacrylate, benzyl cinnamate, trans-3-nonen-2-one, and combinations thereof, wherein said at least one compound (i) is used in an amount of from 0.1 to 20% by weight based on the weight of said polyurethane foam, and wherein said unsaturated functionality of at least 0.1% by weight of compound (i) is either:

1) reacted with the primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in said polyurethane foam, or

2) unreacted and available for reaction with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in said polyurethane foam.

Claims 7-8. (Cancelled).

9. (Previously Presented) An article selected from the group of upholstery, a foam backing for carpets, a mattress, a foam backing for an instrument panel, a steering wheel, a shoe sole, and combinations thereof formed from said polyurethane foam as set forth in claim 6.

10. (Currently Amended) A polyurethane foam as set forth in claim 6 wherein said at least one compound (i) is used in an amount of from 0.5 to 10% by weight based on the weight of said polyurethane foam, and wherein said unsaturated functionality of at least 0.5% by weight of compound (i) based on the weight of the polyurethane foam is either:

1) reacted with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in said polyurethane foam, or

2) unreacted and available for reaction with a primary and/or secondary amine formed from cleavage of a urethane and/or urea bond in said polyurethane foam.